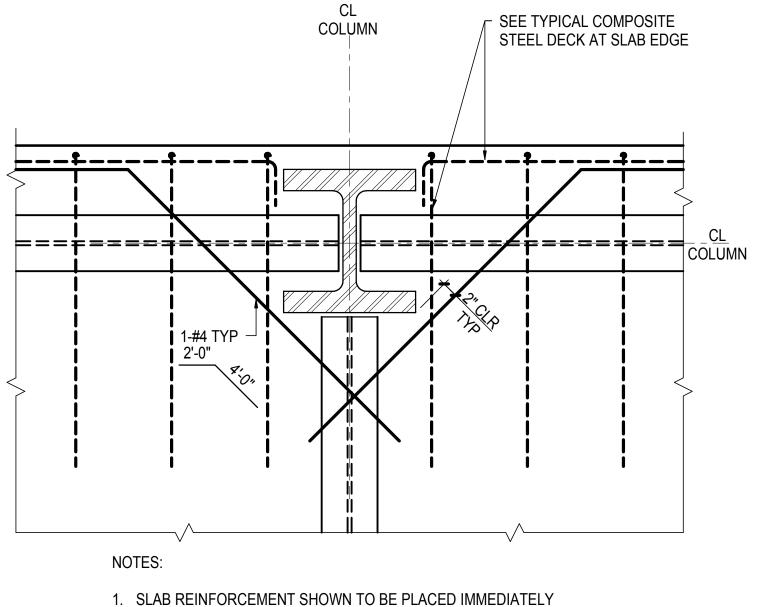


TYPICAL SLAB REINFORCEMENT AT EXTERIOR COLUMN SLAB EDGE EXTENDS 2" OR MORE BEYOND FACE OF

COLUMN

COLUMN

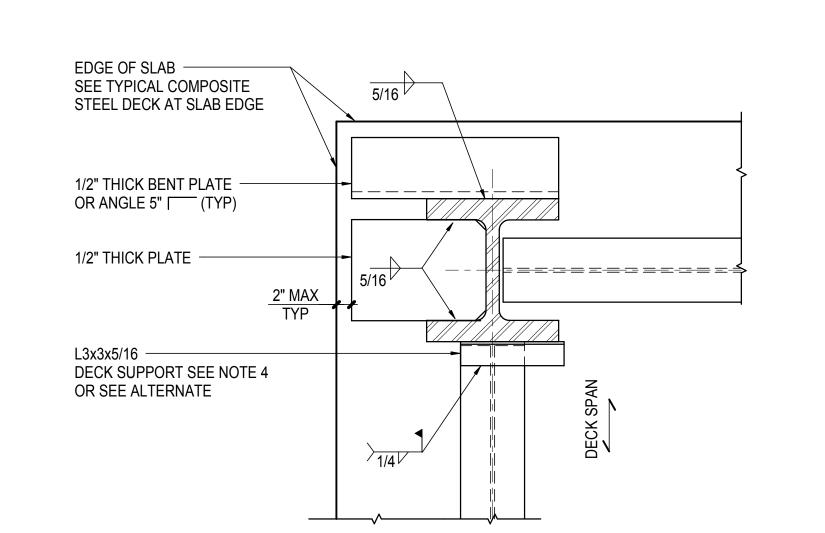


 SLAB REINFORCEMENT SHOWN TO BE PLACED IMMEDIATELY BELOW THE TYPICAL SLAB TOP BAR REINFORCEMENT

2. SEE TYPICAL DECK SUPPORT AT COLUMN DETAIL

TYPICAL SLAB REINFORCEMENT AT EDGE COLUMN SLAB EDGE EXTENDS LESS THAN 2" BEYOND FACE OF 2 COLUMN

NOT TO SCALE



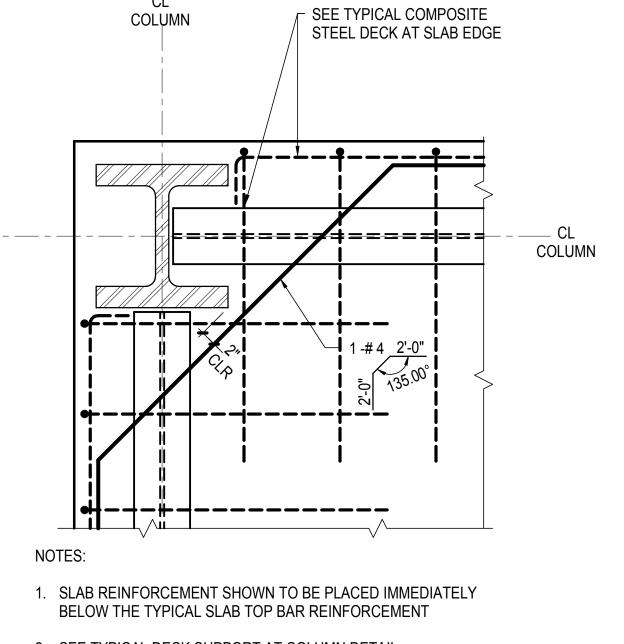
DETAIL AT CORNER COLUMN

EDGE — OF SLAB STEEL DECK AT SLAB EDGE COLUMN 3'-0" 1. SLAB REINFORCEMENT SHOWN TO BE PLACED IMMEDIATELY BELOW THE TYPICAL SLAB TOP BAR REINFORCEMENT 2. SEE TYPICAL DECK SUPPORT AT COLUMN DETAIL

COLUMN

SEE TYPICAL COMPOSITE

TYPICAL SLAB REINFORCEMENT AT CORNER COLUMN SLAB EDGE EXTENDS 2" OR MORE BEYOND FACE OF 3 COLUMN
NOT TO SCALE



COLUMN

2. SEE TYPICAL DECK SUPPORT AT COLUMN DETAIL TYPICAL SLAB REINFORCEMENT AT CORNER COLUMN SLAB EDGE EXTENDS LESS THAN 2" BEYOND FACE OF

4 COLUMN

NOT TO SCALE

- 1/2" THICK BENT PLATE -

OR ANGLE 5" (TYP)

EDGE OF SLAB 1/2" THICK BENT PLATE -EDGE OF SLAB SEE TYPICAL COMPOSITE STEEL OR ANGLE 5" (TYP) SEE TYPICAL COMPOSITE DECK AT SLAB EDGE STEEL DECK AT SLAB EDGE 5/16 6 5/16 6 5/16 / 5 5/16 / 5 L3x3x5/16 DECK SUPPORT SEE NOTE 4 L3x3x5/16 -OR SEE ALTERNATE DECK SUPPORT SEE NOTE 4 OR SEE ALTERNATE

DETAIL AT EDGE COLUMN

DETAIL AT EDGE COLUMN

2. ATTACH DECK (ENDS AND SIDE LAPS) TO SUPPORT ANGLES OR PLATES TYPICAL

3. SEE TYPICAL SLAB REINFORCEMENT AT COLUMN DETAILS

1. SEE ADDITIONAL DETAILS AT EXTERIOR WALL SUPPORTS

4. CONTRACTOR SHALL COORDINATE AND PROVIDE ANGLES AS REQUIRED FOR SUPPORT OF DECK NOTCHED AROUND COLUMN TYPICAL AT ALL FLOORS AT ALL COLUMNS SIZES SHOWN ARE MINIMUM CONTRACTOR TO VERIFY FOR ACTUAL CONDITIONS

 $TYP \rightarrow \frac{1}{4}$ DECK SUPPORT SEE NOTE 4 OR SEE ALTERNATE ALTERNATE DECK SUPPORT L3x3x5/16 DIAGONAL ANGLES LEG DOWN AS ALTERNATE TO DECK SUPPORT COORDINATE WITH OTHER TRADE CONTRACTORS SEE NOTE 4

DETAIL AT INTERIOR COLUMNS

TYPICAL SLAB REINFORCEMENT AT INTERIOR COLUMN

NOT TO SCALE

TYPICAL DECK SUPPORT AT COLUMN

NOT TO SCALE

1. SLAB REINFORCEMENT SHOWN TO BE PLACED IMMEDIATELY BELOW THE TYPICAL SLAB TOP BAR REINFORCEMENT

2. SEE TYPICAL DECK SUPPORT AT COLUMN DETAIL

1-#4x4'-0" TOP

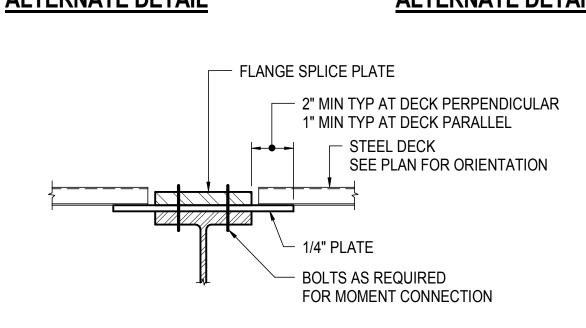
BAR TYPICAL AT

EACH STEEL

COLUMN

3'-0" MAX PIPE SLEEVES OR CORED OPENINGS TO BE COORDINATED WITH OTHER TRADE CONTRACTORS 1/4" PLATE -L3x2x3/8 MIN WELDED TO MOMENT PLATE **ALTERNATE DETAIL ALTERNATE DETAIL**

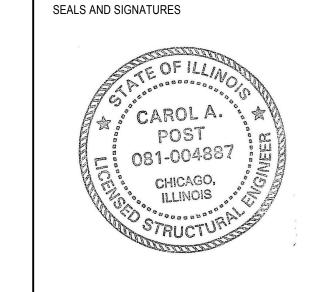
COLUMN



1. DETAIL TO BE COORDINATED WITH MEP 2. SEE NOTES FOR TYPICAL DECK SUPPORT AT COLUMN DETAILS TYPICAL DECK SUPPORT AT WET COLUMN
NOT TO SCALE

L4x4x3/8 TYP

8 TYPICAL DECK SUPPORT AT MOMENT CONNECTION
NOT TO SCALE



SMITHGROUP

SUITE 2200

SMITHGROUP, INC 35 EAST WACKER

CHICAGO, IL 60601

www.smithgroup.com

SUITE 2200

312.641.0510 T 312.641.0668 F

www.jjr-us.com

Affiliated Engineers, Inc. 5802 Research Park Boulevard

Thornton Tomasetti

330 N. Wabash Avenue, Suite 1500

Madison, Wisconsin 53719 Tel 608.238.2616 Fax 608.238.2614

Thornton Tomasetti, Inc.

Chicago IL 60611-7622

T 312.596.2000 **F** 312.596.2001

TERRA ENGINEERING LTD.

225 West Ohio Street, 4th Floor Chicago, Illinois 60654 T:(312)467-0123 F:(312) 467-0220

CHICAGO, ILLINOIS 60601

T 312.641.0770 F 312.641.6728

ISSUED FOR CONSTRUCTION REV. NO. DESCRIPTION

Facilities Management Services

CRYSTALLIZATION FACILITY,

ARGONNE NATIONAL LABORATORY

PROJECT NORTH

PROJECT NO C10539.00 DRAWING TITLE TYPICAL COMPOSITE AND STEEL DECK **DETAILS**

PROJECT TITLE ADVANCED PROTEIN

A/E CADD FILE S5.3.3 A/E DWG. NO. Author S5.3.3 CHECKED Checker PROJECT MANAGER DWG STATE ANL - JESSE ADAMS BIND ORDER DATE - 08/31/11

FACILITY DOCUMENT NUMBER J446-101-W-

W OR HSS COLUMN